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BASIC GOALS

1. Determine Standard Parts
2. Route Information Through the Standards and Users Communities
3. Encourage Standardization

A Standard Part Per MIL-STD-975

1. Application Need
2. Technological Maturity
3. Availability of Manufacturers
4. Test or Usage History
5. Characterization Data
6. Evaluation Tests
7. Specification
8. Qualification

Standard Wire in MIL-STD-975

MIL-W-22759 Fluoropolymer	
MIL-W-81381 Polyimide	Removed 1993
MIL-W-16878 Fluoropolymer (non-QPL)	Removed 1993
MIL-C-17 RF Cable	
MIL-C-27500 Cable	

What Is Space Grade? or

What Is Grade 1 and Grade 2?

– Outgassing	– Flammability
– Toxicity	– Odor
– Atomic Oxygen	– Toxicity
– Arc Tracking	– Cold Flow

Center Specific and Application Specific

Conduit and Catalyst for Information Transfer

SAE		NASA Interconnection Standardization Working Group
EIA		Space Parts News
NEMA		
DESC/DISC/ Army Lakehurst	NPPO	NASA Advisories
NAWC		NAS Database
ESA		NASA Parts Steering Committee
NASA		

I S W G

NASA Interconnection Standardization Working Group

NASA	Performance Requirements
OEMs	Procurement, Available Part Quality
Military	Performance Requirments, Qualification, Specifications
Industry	Standards, Manufacturing Techniques, Available Product (planned)
Academia	Test Data

Past and Present Wire Issues

- Red Plague
- Circular Mil Area
- Flammability of ETFE and XL–ETFE
- Degree of Crosslinking
- Conductor Plating
- Arc Tracking – Hybrid Wire
- Derating